

### 3/18 BIOLOGY CONFERENCE CALL MINUTES

Attending Call:

Ashok Desphande

Eric Frohmberg

Paul Caruso

Vic Crecco

#### TASKS:

Eric Frohmberg will contact Gary Shepherd to see if interested in joining  
Eric Frohmberg will summarize MRFSS Rec Catch data and distribute for discussion

Paul Caruso will write a page or so on bluefish populations and migration and distribute for discussion

Vic Crecco will write a page or so on striped bass pops and migration and distribute for discussion.

All these things will be posted on the website.

NEXT MEETING: APRIL 29<sup>th</sup> 10 AM.

Went over outstanding issues from last meeting. That mostly consisted of Eric needing to contact Gary Shepherd.

Then we discussed the layout for chapter:

#### Part 1:

Extent of fishery –

summarize recreational fishery from MRFSS data  
striped bass

There was some discussion about the commercial fishery, but Eric pointed out that this effort is specific to recreational fisheries, we have no jurisdiction over commercial fisheries.

bluefish  
get at the issue of in areas where there is or is not an advisory, is there a fishery

There was some discussion of the categories for MRFSS – namely that it includes bait – overall thought not to be significant for striped bass and bluefish. For bluefish it may be significant in south. We will discuss qualitatively in any write up.

Summarize (briefly) State Recc. Regs

Overall, though this approach sounded reasonable – the point being need to focus on areas where there is a significant population, as well as fish being caught (e.g., folks may not like to catch striped bass in a particular state). Someone pointed out that makes sense as the coastal migratory stock for striped bass don't really go past Hatteras.

#### Part II

What do we know about the fisheries  
Are there different populations  
striped bass

General feeling per last conference call is yes, we should focus on the breeding populations of the Hudson, Delaware, Chesapeake and Aberlmarle/Roanoke  
**Vic will write up something describing the populations**  
bluefish

Vic discussed one hypothesis about two spawning groups - one in the spring vs. fall off of long island. Dave Conover from SUNY thinks just periodic spawning from Carolina to NY bight. No evidence that there are several stocks along Atlantic Coast. Vic was involved in an assessment in 1984, and the evidence is pretty mixed. No one knows the interdependency among Gulf of Mexico stock vs. Atlantic stock. There maybe some transoceanic migration but that is based on only one or two tags off of Madagascar. Nothing seems to impede their distribution. Paul said this was about it last week at stock assessment meeting and generally they are considered one stock genetically. **Paul will write something up describing the populations.**

Part III – Discussed and agreed that this makes sense to fold into part 2 – the populations and their migrations are intimately related.

What do we know about the migrations  
Except for breeding populations for striped bass are these pops moving up and down the coast as one?  
striped bass

Vic says idea makes sense. Based on tagging report in 2004, Table 10 lists breakout of fish where tagged along the coast by state. What is clear is that the Hudson stock is from NJ northward. Out of 222 recoveries in 2003 only 8 caught south of NJ, rest in NY, NJ, Mass. Based on these data and data from other reports there seems to be recurring trend that they migrate north, not south. Seems the risk would be less below NJ. Others populations are more difficult to discern based on this data.

Looking at that same table looks like there is a drop off of fish north of Mass. May be reflective of fishery data. Altho if look at MD data, the Chessie fish are caught in Md and Va., can see a uniform distribution from DE to NH and into Maine. Looks like Chessie stock more nomadic.

Temporal and spatial – can talk about. Its thought they leave around June. then coastal migratory in summer and fall. During Oct. move south. Most overwinter off NC. Decent understanding of the Chessie Stock where goes seasonally. Least info about Aberlmarle/Roanoke. Not as many recoveries. Eric asked if this is due to sampling effort? Thought to be due to recent status of this breeding location and hence, size of fish. As stock gets larger they move more. Also sex, females move more and are larger. Now this population is old enough to be of a size where they migrate more.

bluefish

Not pop specific and don't have long term tagging information. These fish are highly migratory and adventurous. At stock assessment meeting – what you see is them scattered over whole coast over summer months. In fall, more offshore but even off NE. In winter months, off Hatteras. This is based on NMFS trawl survey. As far as PCB sampling. all one mixed stock.

There was some discussion of whether there are more pcbs in striped bass or bluefish. Eric pointed out generally more in bluefish. The discussion centered around how bluefish are more highly pisciverous and higher in fat. On other hand, stripers go into freshwater, and hence pick up PCBs.

How does this impact sampling plans:

Do migration patterns impact a pop in a given area at any given time?

Striped bass

bluefish

Recommendations for sampling to get at good representation of pop

NY really is the expert on this sort of sampling, so we'll work off their experience.

Given all this, can we make any sense of the data?

Striped bass

bluefish

There was a brief discussion of the data from the data group.

Recommendations

future sampling recc

Striped bass

e.g., spatial and temporal diversity ala NY

Bluefish

future analysis

Striped bass

include sex

way to analyze for pops? e.g., otolith research or DNA?

Bluefish

There was a very interesting discussion on the sex ratios – except for those states w/ residence populations, most of coastal stock is females. For larger fish the ratio is 9 to 1 for females. Males don't migrate as much. Trophy fish almost always females. One out of a thousand males in market samples. There are lots of small males in estuaries where they breed and the males don't migrate nearly as far. Not many males reach 28 inches. One theory is that the males turn to females when they get old, but the extent of this unclear.

There was a brief discussion of the otolith research. Felt it was generally not realistic budget wise.